

ON SOME NAKED AUSTRALIAN MARINE MOLLUSCA.

PART I.

(Plate VII.).

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Partly because they offered no trophies to grace the collector's cabinet and partly because the literature treating of the subject is both meagre and difficult of access, the Australian naked mollusca have been little studied.

A recent donation to the Museum by J. P. Hill, Esq., F.L.S., Demonstrator of Biology of the Sydney University, comprising several species of shell-less mollusca, and which in the course of official duties required determination, brought forcibly to my notice the poverty of published information regarding them.

Commencing my inquiries with a huge *Pleurobranchus* (as understood by Fischer), I found that in Australia two species only are as yet recorded, *P. punctatus*,* Q. and G., Voy. Astrolabe Zool. ii. p. 299, pl. XXII. ff. 15, 19, from Jervis Bay, N.S.W., and *P. angasi*, described and figured by E. A. Smith, "Report on the Zoological Collections made in the Indo-Pacific Ocean during the Voyage of the Alert, 1881-2," p. 88, pl. vi. ff. K, K'; and collected in Sydney Harbour by Dr. Coppinger.

A *Pleurobranchidium maculatum* was collected, figured and described by Quoy and Gaimard in association with *P. punctatus*.

If we extend our survey to New Zealand we find another species *P. ornatus*, Cheeseman (P.Z.S. 1878, p. 275, pl. xv. ff. 1, 2).

* I am indebted to the kindness of Prof. Tate for a reference to this species.

From Polynesia the researches of Garrett and Pease have brought to light *P. grandis*, *ovalis*, *delicatulus* and *tessellatus*, Pease (Am. Journ. Conch. iv. pp. 78-80, pls. ix. and x.). The species under consideration resembled none of these, but of all the figures and descriptions within my reach it most approximated to those of *P. testudinarius* on p. 571 of Fischer's Manuel de Conchyliologie.

Most opportunely, whilst still investigating the new species, I received from Prof. Vayssière of Marseilles, France, a welcome gift of a copy of his "Recherches Zoologiques et Anatomiques sur les Mollusques Opisthobranches du Golfe de Marseille," "Pt. i.—Tectibranches," forming Tome ii.—Zoologie—of the "Annales du Musée d'histoire naturelle de Marseille." The full account, the best hitherto given, herein contained, of the above mentioned mollusc, confirmed me in recognising in the Mediterranean animal the nearest known relative to our Sydney slug.

For the French species, Prof. Vayssière adopts the name of *Oscanius tuberculatus*, Delle Chiaje; embracing as synonyms *Pleurobranchus forskahli*, Delle Chiaje, *P. mammillatus*, Schultz, and *P. testudinarius*, Cantraine.

My correspondent amends and expands the genus *Oscanius* of Leich on p. 121 of the above quoted work. According full generic rank to this division, he unites with it as an absolute synonym, Gray's genus *Susania* (Guide to the Mollusca of the British Museum, 1857, p. 202). This is the interpretation of *Oscanius* here followed.

OSCANIUS HILLI, n.sp.

Animal elliptical, thick, subglobose; in life, as well as I can recollect, dark plum colour; as contracted in alcohol measuring 140 mm. in length by 120 mm. in width and 50 in height; without a shell. Mantle very large, thick and muscular, overlapping the body so as almost to envelope it; irregularly covered outside by numerous large, warty protuberances; deeply, squarely notched in front, entire throughout the rest of its circumference. Rhinophores appressed to each other, externally split to the base, thick and subcylindrical. Eye not observed. Foot large, somewhat

cordate in outline, bearing at the tail, on the sole and in the median line, a gland 30 mm. by 10 mm., distinguished from the rest of the sole by its thick transverse rugosities and black colour. Gill-plume tucked in between the mantle and the foot, a third as long as the animal, bipinnate, folded down the centre so as to expose one side only, the stalk without the pinnæ within, attached to the body as far as the 16th filament; pinnæ 24, rapidly increasing in length from the anterior to the 6th, thence gradually decreasing to the posterior end, each filament attached beneath for more than half its length; midrib beaded at the junction of each plumelet. Anus just within the tip of the gill and behind the membrane upon which it is hung. External genitalia located immediately before the branchia, wrapped within two oblong flaps.

The specimen above described was, with two others, dredged in 8 fathoms, about a mile south of the Sow and Pigs Reef, Port Jackson, by the Marine Excursion of 17/12/92 of the Field Naturalists' Society of N.S.W., and was presented to the Australian Museum by the Society. Another specimen, dredged off Stokes' Point, in Broken Bay, N.S.W., has been presented by Mr. Hill. Mr. Brazier also informs me that specimens of this species from Port Stephens, N.S.W., have come under his notice.

EXPLANATION OF PLATE.

Fig. 1.—Dorsal aspect of *Oscanius hilli*, from spirit specimen.

Fig. 2.—Ventral aspect of ditto, the free edge of the foot bent over to expose the anus, gill-plume and genitalia; on the sole of the foot the tail gland is shown. Both drawings slightly reduced and photo-lithographed from the pen sketches of the writer.